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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of Customer Number: 46320

Katsuhisa KATAOKA Confirmation Number: 9826

Application No.: 10/632,178 Group Art Unit: 2194

Filed: July 31, 2003 Examiner: N. Price

For: INTERFACE APPARATUS FOR STRUCTURED DOCUMENTS

APPEAL BRIEF

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed December 17, 2007, wherein Appellant appeals from the Examiner's rejection of claims 19-29 and 31-35.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on July 31, 2003, at Reel 014362, Frame 0502.

II. RELATED APPEALS AND INTERFERENCES

Appellant is unaware of any related appeals and interferences.

III. STATUS OF CLAIMS

Claims 19-29 and 31-35 are pending and finally rejected in this Application. Claims 1-18, 30, and 36 have been cancelled. It is from the final rejection of claims 19-29 and 31-35 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

An Amendment under 37 C.F.R. § 1.116 was filed on December 17, 2007, subsequent to the imposition of the Second and Final Office Action dated September 17, 2007 (hereinafter the Second Office Action). In an Advisory Action dated January 23, 2008, the Examiner indicated the for purposes of appeal, the proposed amendments were entered.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Referring to Figure 2 and also to independent claims 19, 25, and 19, an interface apparatus, method, and computer program product for a first structured document is disclosed. A first processor 10 receives a processing request from a first application program 11, as a processing requester, for a first structured document 12 (S1) (lines 1-3 of paragraph [0014]) A lexical analysis of the first structured document is performed to obtain a series of events related to the first structured document in order (S2) (lines 4-6 of paragraph [0014]). Store means 15 associate the series of events, as event set information, with the first structured document 12 and store the event set information into a cache 16 (S4) (page 10, lines 4-8). A first notification means 17 notifies the first application program 11 of the series of events related to the first structured document 12 in order from the event set information in the cache 16 upon the event

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set information being in the cache 16 with respect to the structured document 12 prior to the processing request being received (S5-S7) (page 10, line 25 through page 11, line 5).

Referring to Figure 6 and also to independent claims 21, 27, and 33, an interface apparatus, method, and computer program product for a structured document requested by an application program as a processing requestor is disclosed. A first processing means 26 reads and performs a lexical analysis on the structured document 12 (S22) (page 14, lines 13-15); notifies the application program 11 of a series of events relating to the structured document 12 in order (S23) (page 14, lines 17-19); associates the notified series of events as event set information with the structured document 12 and stores the event set of information into a cache 16 (S24) (page 14, lines 19-22). A second processing means 27 reads the event set information of the cache 16 with respect to the structured document 12 (S28) (page 15, lines 8-12) and notifies the application program 11 of the series of events relating to the event set information in order (S29) (page 15, lines 12-14). A control means 28 determines if the event set information of the structured document is in the cache 16 (S1) (page 14, lines 8-10) to delegate the processing of the structured document 12 to the first processing means 26 upon the event set information not being in the cache 16 (S22) (page 14, lines 10-12) or the second processing means 28 upon the event set information being in the cache 16 (S28) (page 15, lines 6-8).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- 1. Claims 20, 26, and 32 were rejected under the second paragraph of 35 U.S.C. § 112;
- 2. Claims 19-21, 25-27, and 31 were rejected under 35 U.S.C. § 103 for obviousness based upon Ayyagari et al., U.S. Patent No. 7,020,681 (hereinafter Ayyagari), in view of Patel, U.S. Patent Publication No. 2002/0107881; and

3. Claims 22-24, 28-30, and 34-35 were rejected under 35 U.S.C. § 103 for obviousness based upon Ayyagari in view of Patel and Coulouris et al., "Distributed Systems Concepts and Design" (hereinafter Coulouris).

VII. ARGUMENT

| 1 | THE REJECTION OF CLAIMS 20, 26, AND 32 UNDER SECOND PARAGRAPH OF 35 U.S.C. § |
|----------------------------------|--|
| 2 | <u>112</u> |
| 3 | For convenience of the Honorable Board in addressing the rejections, claims 26 and 32 |
| 4 | stand or fall together with independent claim 20. |
| 5 | |
| 6 | On page 3 of the Second Office Action, the Examiner asserted the following: |
| 7 8 9 | Claims 20, 26 and 32 recite multiple instances of event set information and refer to the event set information. It is not clear which instance is being referenced. |
| 10 | On page 12 of the Second Amendment, Appellant presented the following arguments. |
| 11 | Specifically, regarding the Examiner's assertions regarding "event set information," Appellant |
| 12 | notes that the claims recite (i) event set information, which is associated with a first structured |
| 13 | document and stored into a cache and (ii) event set information not stored in the cache and |
| 14 | associated with a second structured document. Thus, the claims clearly distinguish between the |
| 15 | different event set information being claimed. |
| 16 | |
| 17 | On page 2 of the Advisory Action, the Examiner responded as follows: |
| 18 19 20 21 22 23 | Applicant's arguments regarding the rejection of claims 20, 26 and 32 under 35 U.S.C. 112, second paragraph, have been fully considered but are not persuasive. Referring to "the event set information" after introducing two separate sets of event set information is not clear as to which event set information is being referenced. There appears to be at least two sets of event set information in the rejected claims. |
| 24 | At the outset, Appellant note that the Examiner has failed to specifically identify what |
| 25 | instance(s) of "event set information" that the Examiner believes is indefinite. Without the |
| 26 | Examiner clearly and specifically identifying these alleged indefinite phrases, the Examiner has |

1 failed to establish a prima facie case of indefiniteness.

THE REJECTION OF CLAIMS 19-21, 25-27, AND 31-33 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON AYYAGARI IN VIEW OF PATEL

For convenience of the Honorable Board in addressing the rejections, claims 20, 25-26, and 31-32 stand or fall together with independent claim 1, and claims 27 and 33 stand or fall together with independent claim 21.

Independent claims 19, 25, and 31

On pages 13 and 14 of the First Amendment, in response to the Examiner's prior rejection based upon the combination of Ayyagari in view of Patel, Appellant presented the following Arguments. As recited in the claims, the claimed invention is directed to receiving a processing request from an application for a structured document. The structured document is then read and a lexical analysis is performed on the structured document to obtain a series of events related to the structured document in order. The series of events are stored, as event set information, in a cache. Upon the event set information being in the cache prior to the processing request being received, the application program is notified of the series of events related to the structured document in order based from the event set information in the cache.

As described in column 6, lines 21-26 (see also Fig. 5A) and column 7, lines 13-17 (see also Fig. 6A) of Ayyagari, "[i]f the document is cached ... the XML document is retrieved from the local cache of XML proxy server 200." On the contrary, the claimed invention recites that

| 1 | event set information (which is produced via lexical analysis of the structured document) is |
|--|---|
| 2 | obtained from cache. |
| 3 | |
| 4 | Regarding the secondary reference of Patel, in the paragraph spanning pages 5 and 6 of |
| 5 | the Office Action, the Examiner asserted the following: |
| 6 7 8 9 10 11 12 | Ayyagari teaches processing XML documents (col. 4 lines 50—67), but fails to specifically teach series of events and event set information. However, Patel teaches the series of events and event set information associated with processing XML documents (¶ 35). It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Ayyagari teaches processing XML documents and Patel teaches what is involved in processing XML documents. |
| 13 | Assuming arguendo that Patel actually teaches what the Examiner asserts Patel to teach, Patel |
| 14 | fails to teach or suggest storing (and subsequently retrieving) series of events, as event set |
| 15 | information, within a cache. Thus, even if one having ordinary skill in the art were motivated to |
| 16 | modify Ayyagari in view of Patel, the claimed invention would not result. The Examiner's |
| 17 | response on page 2 of the Second Office Action, however, did not address the substance of these |
| 18 | arguments. |
| 19 | |
| 20 | In the first full paragraph on page 5 of the Second Office Action, the Examiner asserted |
| 21 | the following: |
| 22 23 24 25 26 27 28 | Ayyagari teaches processing XML documents (col. 4 lines 50 - 67), but fails to specifically teach series of events and event set information. However, Patel teaches the series of events and event set information associated with processing XML documents (¶ 35). It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Ayyagari teaches processing XML documents and Patel teaches what is involved in processing XML documents. |
| 29 | Based upon the Examiner's own admission, Ayyagari fails to teach the "event set information," |
| 30 | which, as claimed, is stored in the cache. |
| | |

Referring to column 6, lines 36-41, Ayyagari teaches that the XML proxy server 200, after receiving the requested document, retrieves a stylesheet and applies the *stylesheet* to the document. This processed document is then stored in local cache. Referring to the Examiner's cited paragraph [0035] (see also Fig. 3), Patel teaches that after the parser 30 and application program 20 retrieve markup content from the markup language document 60, an associated *stylesheet* 64 is located and utilized. Therefore, even if Ayyagari were modified in view of Patel, the claimed invention would <u>not</u> result.

Specifically, as taught by both Ayyagari and Patel, a stylesheet is applied.¹ As already admitted by the Examiner with regard to Ayyagari, the result from the application of the stylesheet is not "event set information." Since, Patel also teaches application of a stylesheet, the result would also not be comparable to the claimed "event set information." Therefore, even if one having ordinary skill in the art were impelled to modify Ayyagari in view of Patel, the claimed invention would not result.

Appellant also notes that the Examiner has failed to establish a realistic common sense rationale to modify Ayyagari in view of Patel. The Examiner's asserted rationale is that "Ayyagari teaches processing XML documents and Patel teaches what is involved in processing XML documents." In essence, the Examiner's rationale is that since both reference involve the processing of XML documents, then one having ordinary skilled in the art would have been impelled to combine the teachings of these references. Not only does such logic comport to none

¹ As is well known by those skilled in the art, a stylesheet is applied to an XML document to format the XML document to be displayed by a browser.

| 1 | of the rationales described in KSR Int'l v. Teleflex Inc., such logic could be applied to any ar |
|--|---|
| 2 | within analogous fields. However, such a broad-brushed approach to a finding obviousness has |
| 3 | consistently been disapproved of. ³ |
| 4 | |
| 5 | Independent claims 21, 27, and 33 |
| 6 | Regarding claim 21, the Examiner only asserted the following on page 6 of the Second |
| 7 | Office Action: |
| 8 9 10 11 12 13 14 15 16 17 | As to claim 21, combination of Ayyagari and Pate) teaches an interface• apparatus for a structured document, comprising: second processing means for reading the information of the cache with respect to the structured document and notifying the application program of the information (col. 4 lines 50 - 67); and control means for checking whether or not the information relating to the structured document is in the cache to delegate the processing of the structured document to the first processing means upon the information not being in the cache, or to the second processing means upon the information being in the cache (col. 4 lines 50 - 67). As readily apparent from comparing the Examiner's statement of the rejection as to claim 21 to |
| 19 | the actual language of claim 21, the Examiner has omitted a substantial portion of the claim |
| 20 | language. However, Appellant proceeds under the assumption that the Examiner is relying upon |
| 21 | the statement of the rejection as to independent claim 19 as to the limitations not addressed with |
| 22 | regard to claim 21. |
| 23 | |
| 24 | Notably, the Examiner has relied upon the same cited passage (i.e., column 4, lines 50-67) |
| 25 | of Ayyagari) to teach limitations as to the first processor (i.e., corresponding to the first |
| 26 | processing means recited in claim 21), the second processing means and the control means for |
| 27 | determining which of the first and second processing means to delegate processing of the |
| | |

 ² 550 U.S. ____ (2007).
 A generalization does not establish the requisite rationale to modify a specific reference in a specific manner to arrive at a specifically claimed invention. <u>In re Deuel</u>, 51 F.3d 1552, 34 USPQ2d 1210 (Fed. Cir. 1995).

structured document. For ease of reference column 4, lines 50-67 of Ayyagari is reproduced below:

A system in accordance with the present invention comprises a proxy server interfacing with at least one client computer and a plurality of remote servers on the Internet. The proxy server is adapted to receive a document request in the form of a uniform resource locator (URL) from a client computer, to forward the request to a designated remote server based on the URL, to receive the requested document from the remote server, and to determine whether the document is an unprocessed XML document. If the document is an unprocessed XML document, the proxy server is further adapted to search a local cache for a processed version of the document, and to transmit the processed version to the requesting client computer. In the event the document is not found in local cache, the proxy server is adapted to process the XML document, route it to the client computer and then store the processed XML document in the server's local cache.

Notably absent from this passage, however, is a teaching of a first processing means <u>and</u> a second processing means <u>and</u> a control means for determining which of the first and second processing means to delegate processing of the structured document, as claimed. Therefore, Ayyagari fails to teach the limitations for which the Examiner is relying upon Ayyagari to teach.

THE REJECTION OF CLAIMS 22-24, 28-30, AND 34-35 UNDER 35 U.S.C. § 103 FOR

OBVIOUSNESS BASED UPON AYYAGARI IN VIEW OF PATEL AND COULOURIS

For convenience of the Honorable Board in addressing the rejections, claims 22-24, 28-29, and 34-35 stand or fall together with independent claim 21.

Claims 22-24, 28-29, and 34-35 respectively depend from independent claims 21, 27, and 33, and Appellant incorporates herein the arguments previously advanced in traversing the imposed rejection of claims 19, 27, and 33 under 35 U.S.C. § 103 for obviousness based upon the combination of Ayyagari and Patel. The tertiary reference to Coulouris does not cure the argued deficiencies of the combination of Ayyagari and Patel. Accordingly, even if one having ordinary skill in the art were motivated to modify Ayyagari in view of Patel and Coulouris, the proposed combination of references would not yield the claimed invention. Appellant, therefore, respectfully

- submits that the Examiner's imposed rejection of claims 22-24, 28-29, and 34-35 under 35 U.S.C. §
- 2 103 for obviousness based Ayyagari in view of Patel and Coulouris is not viable.

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Conclusion

- Based upon the foregoing, Appellant respectfully submits that the Examiner's rejections
- 6 under 35 U.S.C. §§ 103, 112 is not viable. Appellant, therefore, respectfully solicits the Honorable
- 7 Board to reverse the Examiner's rejections under 35 U.S.C. §§ 103, 112.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is

hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in

connection with the filing of this paper, including extension of time fees, to Deposit Account 09-

0461, and please credit any excess fees to such deposit account.

Date: February 19, 2008

Respectfully submitted,

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CUSTOMER NUMBER 46320

VIII. CLAIMS APPENDIX

19. An interface apparatus for a first structured document, comprising:

a first processor for

receiving a processing request from a first application program, as a processing requester, for a first structured document, and

performing a lexical analysis of the first structured document to obtain a series of events related to the first structured document in order;

store means for

associating the series of events, as event set information, with the first structured document,

storing the event set information into a cache; and

first notification means for notifying the first application program of the series of events related to the first structured document in order from the event set information in the cache upon the event set information being in the cache with respect to the structured document prior to the processing request being received.

20. The interface apparatus for the first structured document according to claim 19, further comprising:

a second processor for performing a lexical analysis of a second structured document having event set information not in the cache, and

second notification means for notifying a second application program as a processing requester of a series of events relating to the second structured document in order, wherein

the store means associates the series of events, notified to the second application program by the second notification means as the event set information, with the second structured document to store the information into the cache.

21. An interface apparatus for a structured document requested by an application program as a processing requestor, comprising:

first processing means for

reading and performing a lexical analysis on the structured document,

notifying the application program of a series of events relating to the structured document in order,

associating the notified series of events as event set information with the structured document, and

storing the event set of information into a cache;

second processing means for

or

reading the event set information of the cache with respect to the structured document, and

notifying the application program of the series of events relating to the event set information in order; and

control means for determining if the event set information of the structured document is in the cache to delegate the processing of the structured document to:

the first processing means upon the event set information not being in the cache,

the second processing means upon the event set information being in the cache.

22. The interface apparatus for the structured document according to claim 21, wherein the control means determines that the event set information is not in the cache with respect to the structured document upon

the event set information relating to a structured document has a same file name as that of the structured document and exists in the cache, and

the event set information relates to a prior structured document existing prior to an update of the structured document.

- 23. The interface apparatus for the structured document according to claim 22, wherein the control means is a parser notified from the application program of a request of the structured document by URI.
- 24. The interface apparatus for the structured document according to claim 22, wherein the first and second processing means are respectively mounted in corresponding parsers, and

the control means is mounted in the application program.

25. A processing method for a structured document, the method comprising:

receiving a processing request from an application program, as a processing requesting, for a series of events relating to the structured document in order with respect to the structured document;

performing a lexical analysis of the structured document to obtain the series of events related to the structured document in order;

associating the series of events, as event set information, with the structured document to store the event set information into a cache; and

notifying the application program of the series of events related to the structured document in order from the event set information in the cache upon the event set information being in the cache with respect to the structured document prior to the processing request being received.

26. The processing method for the structured document according to claim 25, further comprising:

reading a second structured document having event set information not in the cache to perform lexical analysis of the second structured document to obtain a second series of events related to the second structured document in order;

notifying a second application program, as a processing requester, of the second series of events related to the second structured document in order, and

associating the second series of events, as event set information, with the second structured document to store the event set information into the cache.

27. A processing method for a structured document requested by an application program as a processing requestor, comprising:

standard processing steps of

reading and performing a lexical analysis on the structured document,

notifying the application program of a series of events relating to the structured document in order,

associating the notified series of events as event set information with the structured document, and

storing the event set of information into the cache;

reduced processing steps of

reading the event set information of the cache with respect to the structured document, and

notifying the application program of the series of events relating to the event set information in order; and

determining if the event set information of the structured document is in the cache to delegate the processing of the structured document to

the standard processing steps upon the event set information not being in the cache, or

the reduced processing steps upon the event set information being in the cache.

28. The processing method for the structured document according to claim 27, wherein the control step comprises:

judging that there is not the event set information in the cache with respect to the structured document as a processing object, when it is judging whether or not there is the event set information of the structured document as the processing object in the cache and when the event set information relating to a structured document having the same file name as that of the

structured document as the processing object exists in the cache but when the event set information relates to a structured document before update of the existing structured document.

- 29. The processing method according to claim 28, wherein the determining step is performed in a parser notified from the application program of a request of the structured document by URI.
- 31. A computer program product recorded on computer readable medium and having stored thereon a computer program comprising a routine set of instructions for causing one or more computers to execute:

receiving a processing request from an application program, as a processing requesting, for a series of events relating to a structured document in order with respect to the structured document;

performing a lexical analysis of the structured document to obtain the series of events related to the structured document in order;

associating the series of events, as event set information, with the structured document to store the event set information into a cache; and

notifying the application program of the series of events related to the structured document in order from the event set information in the cache upon the event set information being in the cache with respect to the structured document prior to the processing request being received.

32. The computer program product according to claim 31, further causing the one or more computers to execute:

reading a second structured document having event set information not in the cache to perform lexical analysis of the second structured document to obtain a second series of events related to the second structured document in order;

notifying a second application program, as a processing requester, of the second series of events related to the second structured document in order, and

associating the second series of events, as event set information, with the second structured document to store the event set information into the cache.

33. A computer program product recorded on computer readable medium and having stored thereon a computer program comprising a routine set of instructions for a structured document requested by an application program as a processing requestor and causing one or more computers to execute:

standard processing steps of

reading and performing a lexical analysis on the structured document,

notifying the application program of a series of events relating to the structured document in order,

associating the notified series of events as event set information with the structured document, and

storing the event set of information into the cache;

reduced processing steps of

reading the event set information of the cache with respect to the structured document, and

notifying the application program of the series of events relating to the event set information in order; and

determining if the event set information of the structured document is in the cache to delegate the processing of the structured document to

the standard processing steps upon the event set information not being in the cache, or

the reduced processing steps upon the event set information being in the cache.

34. The computer program product according to claim 33, wherein the control step comprises:

judging that there is not the event set information in the cache with respect to the structured document as the processing object, when it is judging whether or not there is the event set information of the structured document as the processing object in the cache and when the event set information relating to a structured document having the same file name as that of the structured document as the processing object exists in the cache but when the event set information relates to a structured document before update of the existing structured document.

35. The computer program product according to claim 34, wherein the determining step is performed in a parser notified from the application program of a request of the structured document by URI.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellant in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

Since Appellant is unaware of any related appeals and interferences, no decision rendered by a court or the Board is attached hereto.